IMA System Indicator On With IMA DTC 77 (P1447) or DTC 78 (P1449)

(Supersedes 04-028, dated April 30, 2010, to revise the information marked by the black bars)

REVISION SUMMARY

Under WARRANTY CLAIM INFORMATION, some operation number and flat rate time information was changed.

PROBLEM

The IMA system indicator comes on and IMA DTC 77 (P1447) (battery module deterioration) or DTC 78 (P1449) (battery module deterioration) is set.

CORRECTIVE ACTION

Replace the battery module. Inspect the motor control module (MCM) and the battery condition monitor (BCM) to determine if they also need to be replaced.

PARTS INFORMATION

Battery Module:

P/N 1D010-PHM-999RM

*(To order, call **877-785-9175**.The battery module will be shipped with a battery lifting tool to ease its removal.)*

Battery Control Module (Battery Condition Monitor):

P/N 1K100-PHM-A01

Control Unit (Motor Control Module) (M/T models):

P/N 1K000-PHM-060

[Order this part only if the existing MCM is not P/N 1K000-PHM-060,1K000-PHM-070, or 1K000-PHM-305.]

Control Unit (Motor Control Module) (CVT models):

P/N 1K000-PHM-905

[Order this part only if the existing MCM is not P/N 1K000-PHM-905 or 1K000-PHM-906.]

WARRANTY CLAIM INFORMATION

The normal warranty applies.

NOTE: IMA components (battery module, battery condition monitor, and motor control module) are covered under warranty for 8 years or 80,000 miles, whichever comes first.

OP#	Description	FRT
1181H5	Replace battery module	1.0
B	Retrieve and clear codes - add	0.3
118116	Replace battery condition monitor	0.5
118115	Replace motor control module	0.5

Failed Part: P/N 1K000-PHM-000

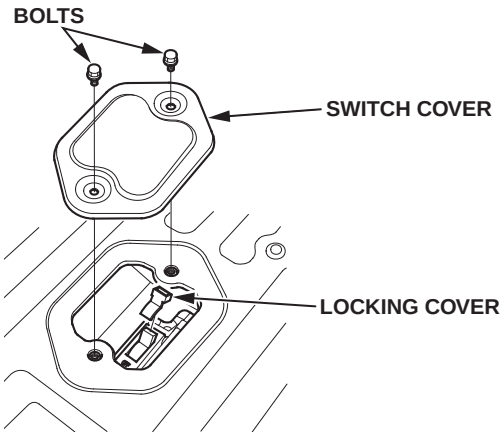
Defect Code: 03214

Symptom Code: 03205

Skill Level: Repair Technician

INSPECTION PROCEDURE

1. Turn the ignition switch to LOCK (0).
2. Remove the cargo floor mat (see page 20-44 of the 2000–04 Insight Service Manual). (In ISIS, use the keyword **FLOOR MAT**, and select **Interior Trim Removal/Installation - Cargo Area** from the list.)
3. Remove the battery module switch cover (two bolts), then remove the locking cover from the switch.



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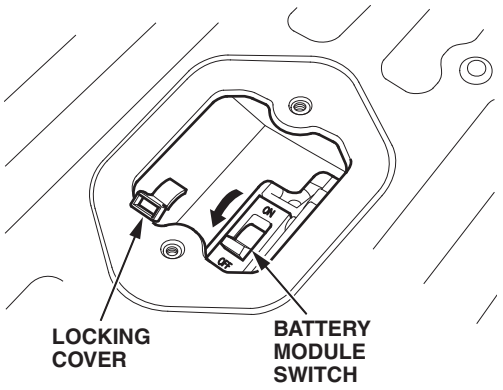
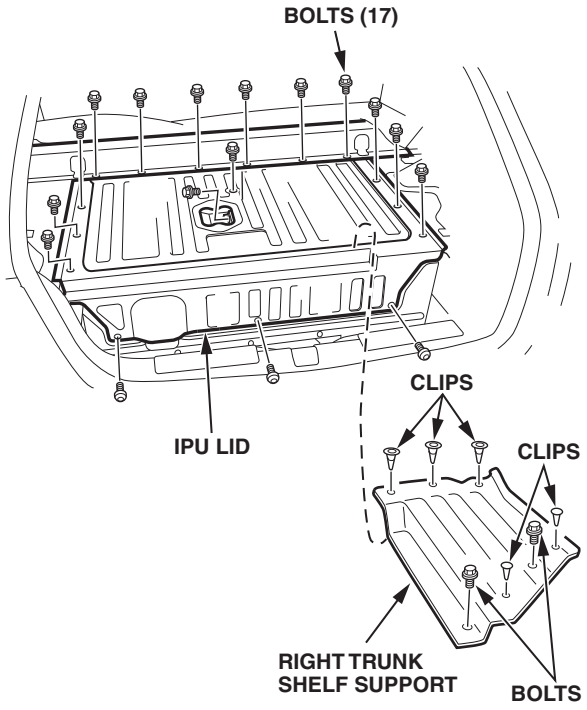
Skill Level R REPAIR

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

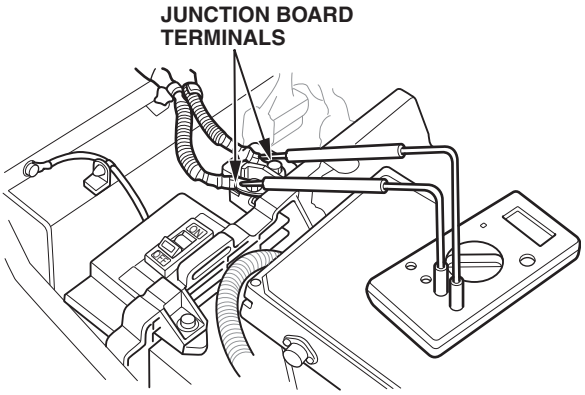
4. Flip the battery module switch to **OFF**. Reinstall the locking cover.



5. Wait at least **5 minutes** to let the capacitors in the system discharge.
6. Remove the right trunk shelf support (five clips and two bolts).



7. Remove the six mid-frame cover bolts. Remove the intelligent power unit (IPU) lid (17 bolts).
8. Measure the voltage at the junction board terminals. There should be **30 V or less**. If you read **more than 30 V**, there is a problem in the circuit; do the DTC troubleshooting first.



9. Look at the part number on the motor control module (MCM), and refer to this chart. If there is a replacement part number listed for it, you need to order a replacement MCM.

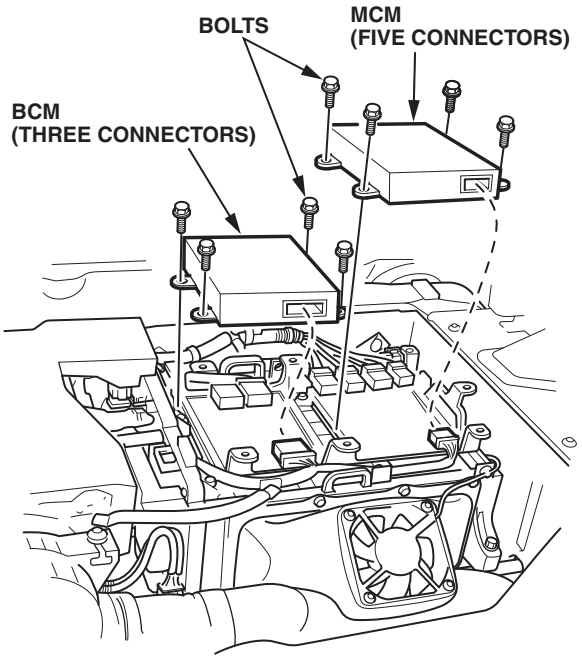
Model Year	MCM Part Number	Replacement Part Number
M/T Models		
2000–01	1K000-PHM-000 thru 1K000-PHM-050	1K000-PHM-060
2000–01 with ECU Module Kit	06060-PHM-305	None
2002–03	1K000-PHM-060	None
2004	1K000-PHM-070	None
CVT Models		
2001	1K000-PHM-900 thru 1K000-PHM-904	1K000-PHM-905
2002–03	1K000-PHM-905	None
2004	1K000-PHM-906	None

10. Look at the part number on the battery condition monitor (BCM). If the part number is not 1K100-PHM-A01, you need to order a replacement BCM.
11. Use the Honda Diagnostic System (HDS) with version 1.011.014 or later software to clear any set DTCs.
12. Reinstall the IPU lid and the mid-frame cover bolts. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
13. Reinstall the right trunk shelf support. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
14. Remove the battery module switch locking cover, and flip the switch to **ON**. Reinstall the locking cover.
15. Reinstall the battery module switch cover.
16. Reinstall the cargo floor mat.

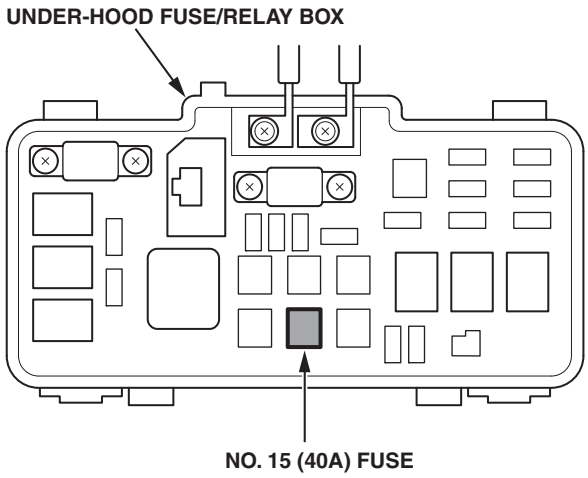
17. Return the vehicle to your customer. Advise your customer that it is OK to drive the vehicle as is until the replacement parts arrive, but the vehicle will have reduced power (no IMA assist).
18. Order a battery module and, if needed, a BCM, an MCM, or both.

REPAIR PROCEDURE

1. Remove the battery module from the vehicle (see page 12-113 of the service manual). (In ISIS, use the keyword **BAT MOD**, and select **Battery Module Removal/Installation** from the list.)
2. Remove the lifting tool from the battery module.
3. Remove the mounting bolts for the MCM and the BCM (eight total). Unplug the electrical connectors (five for the MCM and three for the BCM), then remove the modules.



4. Install the MCM and the BCM in the new battery module. Use the original MCM and BCM if no replacement was needed; otherwise, use the appropriate replacement parts. Torque the mounting bolts to **9.8 N·m (7.2 lb-ft)**.
5. Install the lifting tool on the battery module.
6. With someone to help you, carefully lift the battery module into the vehicle, and set it down into position. Remove the lifting tool.
7. Plug in the connectors, and install the Y condenser harness. Then install the mounting bolts. Torque the bolts to **24 N·m (17 lb-ft)**.
8. Install the battery module air duct. Torque the bolt to **9.8 N·m (7.2 lb-ft)**.
9. Connect the high voltage cables to the junction board. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
10. Install the front and rear IPU braces and the mid-frame. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
11. Install the foam inserts.
12. Install the IPU lid. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
13. Reinstall the right side trunk shelf support. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
14. Remove the battery module switch locking cover, and flip the switch to **ON**. Reinstall the locking cover.
15. Reinstall the battery module switch cover.
16. Reinstall the cargo floor mat.
17. Remove the No. 15 (40A) fuse (EPS control unit) from the under-hood fuse/relay box.



18. With the transmission in Neutral, and the clutch released on M/T models, start the engine. Hold it at **3,500 rpm** until the IMA battery level indicator shows at least **50 percent** charge.
19. Turn off the engine, and reinstall the No. 15 fuse.